

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1-35 are pending in the application, with 1, 9, 19-21, 25, 29, 33, and 34 being the independent claims. Claims 1, 5, 6, 19, 21, 26, and 27 are amended to improve their form. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Objections to the Drawings

On page 2, the Office Action states:

The application is filed with some informal drawings which are acceptable for examination purposes only. Formal drawings will be required in response to this Office Action or when the application is allowed.

Accordingly, Applicants submit formal drawings herein. Applicants respectfully therefore request that this objection be reconsidered and withdrawn.

Rejections under 35 U.S.C. § 102

In paragraph 2 of page 2 of the Office Action, claims 1-11, 13, 14, 17, and 19-35 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No.

6,226,300 to Hush et al. (hereinafter Hush). Applicants respectfully traverse the rejection, and request that it be withdrawn.

Hush relates to a "tree search technique that skips levels" (see Title of Hush). Referring to FIG. 4 of Hush, an interrogator 26 sends a command causing each device 12 of a number of responding devices 12 to select a random number from a known range to use as the device's arbitration number. Three variables are used to interrogate devices: an arbitration value (AVALUE), an arbitration mask (AMASK), and a random value ID (RV). Interrogator 26 sends an "Identify" command to cause each device 12 to select its random number. Interrogator 26 sends an arbitration value (AVALUE) (e.g., a 4 bit value) and an arbitration mask (AMASK) (e.g., a 4 bit value) to devices 12. Devices 12 then evaluate the following equation: $(AMASK \& AVALUE) == (AMASK \& RV)$, where "&" is a bitwise AND function, and "==" is an equality function. For each device 12, if the equation evaluates to "1" (TRUE), then the particular device 12 will reply. If the equation evaluates to "0" (FALSE), then the particular device 12 will not reply. According to Hush, by performing this in a structured manner, eventually a single device 12 will respond with no collisions. Then, interrogator 26 can conduct subsequent uninterrupted communications with the device 12. (Col. 6, lines 7-39 of Hush). This is the search tree methodology of Hush.

Thus, in the search tree methodology of Hush, a device 12 does not transmit its random value to the interrogator 26. Instead, interrogator 26 transmits data to devices 12 that each device 12 uses in an equation involving its particular random value, to determine whether the particular device 12 will reply to interrogator 26. A bit-by-bit

exchange between interrogator 26 and devices 12 does not occur when an interrogator 26 is identifying devices 12 in Hush. (See col. 6, lines 7-39 of Hush).

Thus, differences exist between Hush and the claimed embodiments of the present invention. The preamble of claim 1 recites a tag that stores an identification number that comprises a first bit pattern. Claim 1 further recites engaging in a binary traversal operation with a reader, including receiving a series of bits from the reader, and responding to each bit of the series of bits with a corresponding bit of the second bit pattern. Hush does not teach responding to each bit of a series of bits from a reader with a corresponding bit of a second bit pattern, such as a random value. Hush teaches transmitting a pair of masks (AVALUE and AMASK) to a tag, and the tag evaluating an equation including the random value to determine whether it will reply. This is different from claim 1, where the tag actually responds to each bit of a series of bits received from a reader *with a corresponding bit of the second bit pattern*. Thus, Hush does not teach each and every element of claim 1.

Accordingly, Applicants respectfully submit that independent claim 1 is patentable over Hush, for at least these reasons. Independent claims 9, 19-21, 25, 29, 33, and 34 are patentable over Hush for generally similar reasons, and further in view of their own features. Furthermore, claims 2-8, which depend from independent claim 1, claims 10, 11, 13, 14, and 17, which depend from independent claim 9, claims 22-24, which depend from independent claim 21, claims 26-28, which depend from independent claim 25, claims 30-32, which depend from independent claim 29, and claim 35, which depends from independent claim 34, are also patentable over Hush for at least these

reasons, and further in view of their own features. Thus, Applicants respectfully request that the rejection of claims 1-11, 13, 14, 17, and 19-35 be reconsidered and withdrawn.

Rejections under 35 U.S.C. § 103

In paragraph 6 of page 4 of the Office Action, claim 12 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Hush in view of U.S. Patent No. 6,412,086 to Friedman et al. (hereinafter Friedman). In paragraph 7 of page 4 of the Office Action, claims 15, 16, and 18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hush in view of U.S. Patent No. 6,397,334 to Chainer et al. (hereinafter Chainer). Applicants respectfully traverse the rejection, and request that it be withdrawn.

As described above, Applicants asserted that independent claim 9 is patentable over Hush. Applicants further assert that Friedman and Chainer do not remedy the deficiencies of Hush with respect to claim 9. Thus, Applicants assert that claims 12, 15, 16, and 18, which depend from claim 9, are also patentable over Hush for at least the reasons described above with respect to claim 9, and further in view of their own features. Accordingly, Applicants respectfully request that the rejection of claims 12, 15, 16, and 18 be reconsidered and withdrawn.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Jeffrey S. Weaver
Attorney for Applicants
Registration No. 45,608

Date: 9-29-05

1100 New York Avenue, N.W.
Washington, D.C. 20005-3934
(202) 371-2600

423233_1.DOC